Abstract of the Disclosure An electrical machine, in particular a generator for motor vehicles, with a rotatably supported rotor (27), is disclosed, whereby at least one bearing (24) serves to support the rotor (27) in a hub (21), and an axially-acting spring force of a spring element (47) acts on the bearing (24), the spring element bearing against the hub (21) with spring force. It is provided that the spring element (47) is a disc spring and is capable of functioning back and forth across a flat position of the spring element (47). (Figure 2)